

Amendments to the Claims

1. (Previously presented) A lithographic material that contains a polymer bearing at least one polyhedral oligomeric silsesquioxane group, wherein the alkyl substituents of the polyhedral oligomeric silsesquioxane group are not linked to the main chain (backbone) of the polymer and contain up to 3 carbon atoms.
2. (Previously presented) A positive tone lithographic material that contains a polymer bearing at least one polyhedral oligomeric silsesquioxane group, wherein the alkyl substituents of the polyhedral oligomeric silsesquioxane group are not linked to the main chain (backbone) of the polymer and contain up to 3 carbon atoms.
3. (Previously presented) A chemically amplified positive tone lithographic material that contains a polymer bearing at least one polyhedral oligomeric silsesquioxane group, wherein the alkyl substituents of the polyhedral oligomeric silsesquioxane group are not linked to the main chain (backbone) of the polymer and contain up to 3 carbon atoms.
4. (Previously presented) A chemically amplified positive tone lithographic material that contains a polymer bearing at least one polyhedral oligomeric silsesquioxane group, wherein the alkyl substituents of the polyhedral oligomeric silsesquioxane group are not linked to the main chain (backbone) of the polymer and comprise ethyl groups.
5. (Previously presented) A chemically amplified positive tone lithographic material that contains a (meth) acrylic polymer, bearing at least one polyhedral oligomeric silsesquioxane group, wherein the alkyl substituents of the polyhedral oligomeric silsesquioxane group are not linked to the main chain (backbone) of the polymer and comprise ethyl groups.
6. (Previously presented) A lithographic process comprising exposing a lithographic material containing a polymer bearing at least one polyhedral oligomeric silsesquioxane group to 157 nm radiation.

7. (Previously presented) A lithographic process comprising exposing a lithographic material containing a polymer bearing at least one polyhedral oligomeric silsesquioxane group to 157 nm radiation, or VUV exposure, or EUV exposure, wherein the alkyl substituents of the polyhedral oligomeric silsesquioxane group are not linked to the main chain (backbone) of the polymer and contain up to 3 carbon atoms.

8. (Previously presented) A lithographic process comprising exposing a lithographic material containing a polymer bearing at least one polyhedral oligomeric silsesquioxane group to 157 nm radiation, or VUV exposure, or EUV exposure, wherein the alkyl substituents of the polyhedral oligomeric silsesquioxane group are not linked to the main chain (backbone) of the polymer and comprise ethyl groups.

9. (Previously presented) A bilayer lithographic process comprising exposing a positive tone lithographic material containing a polymer bearing at least one polyhedral oligomeric silsesquioxane group to radiation, wherein the alkyl substituents of the polyhedral oligomeric silsesquioxane group are not linked to the main chain (backbone) of the polymer and contain up to 3 carbon atoms.

10. (Previously presented) A bilayer lithographic process comprising exposing a positive tone lithographic material containing a polymer bearing at least one polyhedral oligomeric silsesquioxane group to radiation, wherein the alkyl substituents of the polyhedral oligomeric silsesquioxane group are not linked to the main chain (backbone) of the polymer and comprise ethyl groups.